

New Rand

DART
AEROSPACEDart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
CanadaTel (613) 632-5200
Fax 613 632-5246**D350-636-024****Job Sheet 193532****Part No:** D350-636-024**Job Qty:** 1 ea**Part Name:** AS350/355 - Skidtubes - Standard w/ Heavy-Duty Wearplates - RH**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 4/16/19**Job Tracking No:****Due Date:** 4/30/19**Created By:** Marie Lajeunesse**Type:** Stock**Description:****Note:** D4168-052 REV.C, IIN-D350-636 REV.K IPP REV.A 18.11.29 NEW ISSUE DD VERF:JFS**Ship Via:****Bill of Materials**

Hand Finishing - 2 - 1-B4/B

Job Routing									
Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	4/30/19	4/30/19	0.00	0.00	Start Up Skidtubes-1		BE
110	Skidtubes	1 pcs	4/30/19	4/30/19	0.00	4.78	Skidtubes-1		BE
120	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC10		CPC DAS
130	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC5		MAY 01 2019 68
140	HandFinish	1 pcs	4/30/19	4/30/19	0.00	0.98	HandFinish1		DR 19/07/19 9-89
150	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC7-2		17/6/6
160	Skidtubes	1 pcs	4/30/19	4/30/19	0.00	4.78	Skidtubes-1		RD 3E mDAS
170	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC10		MAY 15 2019 58
180	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC5		MAY 15 2019 68
190	HandFinish	1 pcs	4/30/19	4/30/19	0.00	0.98	HandFinish2		MAY 16 2019 9-89
200	SprayPaint	1 pcs	4/30/19	4/30/19	0.00	0.61	Spray Paint		RD 19-5-16
205	Outsource	1 pcs	4/30/19	4/30/19			ATE003-VC	5	10/14
210	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC14		UL 19-6-24
230	HandFinish	1 pcs	4/30/19	4/30/19	0.00	0.98	HandFinish4		UL 19-6-24
240	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC5		JUN 2 1 2019 68
250	Packaging	1 pcs	4/30/19	4/30/19	0.00	0.00	Packaging1-3		23 9-89
260	QC	1 pcs	4/30/19	4/30/19	0.00	0.00	QC4	DAS	9-89
270	Packaging	1 pcs	4/30/19	4/30/19	0.00	0.00	Packaging3-1	75	JUL 1 1 2019
275	DC	1 pcs	4/30/19	4/30/19	0.00	0.00	DC	9-89	9-89 JUL 1 1 2019
280	QC21-FG	1 Ea	4/30/19	4/30/19	0.00	0.00	QC21		21 JUL 1 1 2019

Part Op 110 - 1- Pick D2600-3 Bent 2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg
 Descriptions: D4168-6 3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill then ream holes using 0.500" reamer. PIN first side. Repeat process on second side. ***ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE*** Drill pilot holes as per Dwg D4168 (D4168-6 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side 4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting, section DK-DK and open to 0.500" 5- Drill tow ring hole using DT9616 detail "DF" 6- Drill most FWD wearplate hole using DT9678 locating of 66.54" hole 7- Open up holes of Detail DF to 0.297" (total of 2 holes per side) +.201" (total of one hole per side DT9616) as per dwg D4168. 8- Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left from bending as per QSI 004 A/R Aluminum Rod batch: 138989 9- Grind welds flush as per Dwg D4168

160 - 1-Open up holes using hole saw of Detail DG and ground handling to 0.625" (total of 8 holes per side) as per dwg D4168. 4-Chamfer holes of Detail DG, ground handling and float holes per dwg D4168 (welding instructions on sheet) 5- Deburr and blow out all chips from inside of tube 6- Prepare tube for welding, remove alodine as required. 7-Bond web D2739 in place as per QSI 015, let cure for 12hrs. A/R Sikaflex-291 batch: 5163437 exp. date: 04/2008 ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)*** 8- Weld spacers D2743 as per dwg D4168 & QSI004 (welding instructions on sheet) A/R Aluminum Rod batch: 139011 10-Grind welds flush as per Dwg D4168 11-Spot face ground handling holes section ES-ES (total of 4 places per side) as per dwg D4168 12- C'bore section ET-ET. ADJUST TOOLING AS REQUIRED. VERF BY: 13- Deburr holes, ensure tube is free of all scratches before sending to paint. ***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING HOLE IN TUBE *****

*****REF TO W/O BATCH:*****

180 - ***VERIFY C'BOARD IS GOOD***

190 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200 - 1- PRIME AS PER DWG AND QSI 005 4.2 PRIMER PRC DESOTO 515X349 BATCH: 5163577 2- PAINT WHITE AS PER DWG AND QSI 005 4.2 PAINT BATCH: 5179047

210 - Inspect for foreign object per QSI 024

230 - 1- Install inserts as per Dwg D4168 2-Inspect for Foreign Objects 3-Install blade fitting D3488-4, wearshoes and ground handling hardware as per dwg D4168 SIKAFLEX 241 BATCH: 5163437 EXP DATE: 14-07-2 5- Coat all exposed fasteners with "LPS Procyon" batch: 14132640

250 - If making a D350-636-216 pick kit will only requires: 1 X AN3C37A 1 X AN3C34A 1 X AN3C42A

260 - *****ensure antiseize is on AN8C21A bolts*****

270 - Identify and pack for shipping as per PPPD350-636-024 Location : FG071

275 - record fwd angle: 89.90 Photocopy blue file and type labels per PPP D350-636-024 CHG 001

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2600-3-BENT-RH	Extrusion Bent RH	1 pcs (1 ea)	90-Start up Operation	010024
D2744	Cap	1 pcs (1 ea)	90-Start up Operation	5166246
D2739	350 I-Beam	1 pcs (1 ea)	160-Skidtubes	5150291
D2743	Crossbolt Spacer	8 pcs (8 ea)	160-Skidtubes	5153407
ALS4-1032-225	Rivnut	4 Ea (4 ea)	230-HandFinish	5162846
AN3C34A	Bolt	1 Ea (1 ea)	230-HandFinish	5167517
AN3C36A	Bolt	4 Ea (4 ea)	230-HandFinish	X 5186091
AN3C6A	Bolt	4 Ea (4 ea)	230-HandFinish	FM13707-1-2
AN6C44A	Bolt	4 Ea (4 ea)	230-HandFinish	5174235
AN8C35A	Bolt	1 Ea (1 ea)	230-HandFinish	5167316
D2745	Bushing	8 pcs (8 ea)	230-HandFinish	5160325
D3488-4	Blade Fitting, RH	1 pcs (1 ea)	230-HandFinish	5163736
D3631-1	Washer	8 pcs (8 ea)	230-HandFinish	5179461
D3873-1	Bushing	7 pcs (7 ea)	230-HandFinish	5181118
D4154-041	Wearplate Assembly	1 pcs (1 ea)	230-HandFinish	5172675
D4170-1	Bushing	4 pcs (4 ea)	230-HandFinish	5191509
D4171-1	Bushing	1 pcs (1 ea)	230-HandFinish	5137508
MS21043-3	Nut	5 Ea (5 ea)	230-HandFinish	5147731
MS21043-6	Nut	4 Ea (4 ea)	230-HandFinish	5099569
MS21083C8	Nut	1 Ea (1 ea)	230-HandFinish	5149197
NAS1149C0332R	Washer	4 Ea (4 ea)	230-HandFinish	5167202
NAS1149C0363R	Washer	9 Ea (9 ea)	230-HandFinish	5158078
NAS1149C0832R	Washer	1 Ea (1 ea)	230-HandFinish	5135100
NAS1515H3L	Washer	4 Ea (4 ea)	230-HandFinish	5076012
AN3C37A	Bolt	1 Ea (1 ea)	250-Packaging	5083559
AN8C21A	Bolt	2 Ea (2 ea)	250-Packaging	5162124
D2741	Replacement Blade	1 pcs (1 ea)	250-Packaging	5160967
MS21083C8	Nut	2 Ea (2 ea)	250-Packaging	5159549
NAS1149D0863J	Washer	2 Ea (2 ea)	250-Packaging	5167203
				5166718

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2600-3-BENT-RH	1	6	0
	D2744	1	23	0
	D2739	1	10	0
160-Skidtubes	D2743	8	151	0
	ALS4-1032-225	4	1,280	0
230-HandFinish	AN3C34A	1	12	0
	AN3C36A	4	351	0
	AN3C6A	4	218	0
	AN6C44A	4	132	0
	AN8C35A	1	62	0
	D2745	8	168	0
	D3488-4	1	2	0
	D3631-1	8	213	0
	D3873-1	7	76	0
	D4154-041	1	0	0
	D4170-1	4	38	0
	D4171-1	1	8	0
	MS21043-3	5	1,090	0
	MS21043-6	4	158	0
	MS21083C8	1	332	0
	NAS1149C0332R	4	3,957	0
	NAS1149C0363R	9	493	0
	NAS1149C0832R	1	340	0
	NAS1515H3L	4	358	0
250-Packaging	AN3C37A	1	84	0
	AN8C21A	2	85	0
	D2741	1	63	0
	MS21083C8	2	332	0
	NAS1149D0863J	2	585	0

Part Specifications
Specifications could not be found.

Plex 4/16/19 11:26 AM Dart.lajeunesse.marie

QTY -041	QTY -042	QTY -043	QTY -044	QTY -051	QTY -052	P/N	DESCRIPTION
X						D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X					D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X				D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X			D4168-044	350 SKIDTUBE ASSEMBLY, RH
				X		D4168-051	350 SKIDTUBE ASSEMBLY, LH
					X	D4168-052	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	1	1	D2739	WEB
8	8	8	8	8	8	D2743	CROSS BOLT SPACER
1	1	1	1	1	1	D2744	CAP
8	8	8	8	8	8	D2745	BUSHING
1		1		1		D3488-3	BLADE FITTING, LH
	1		1		1	D3488-4	BLADE FITTING, RH
4	4	4	4			D3490-1	CROSS BOLT SPACER
4	4					D3490-3	CROSS BOLT SPACER
		4	4			D3490-5	CROSS BOLT SPACER
8	8	8	8			D3492-041	PLUG ASSEMBLY
8	8					D3492-043	PLUG ASSEMBLY
		8	8			D3492-045	PLUG ASSEMBLY
8	8	8	8	8	8	D3631-1	WASHER
7	7	7	7	7	7	D3873-1	BUSHING
1	1	1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1						D4168-1	SKIDTUBE WELDMENT, LH
	1					D4168-2	SKIDTUBE WELDMENT, RH
		1				D4168-3	SKIDTUBE WELDMENT, LH
			1			D4168-4	SKIDTUBE WELDMENT, RH
				1		D4168-5	SKIDTUBE WELDMENT, LH
					1	D4168-6	SKIDTUBE WELDMENT, RH
4	4	4	4	4	4	D4170-1	SPACER
1	1	1	1	1	1	D4171-1	BUSHING
4	4	4	4	4	4	ALS4-1032-225	INSERT
1	1	1	1	1	1	AN3C34A	BOLT
4	4	4	4	4	4	AN3C36A	BOLT
4	4	4	4	4	4	AN3C6A	BOLT
4	4	4	4	4	4	AN6C44A	BOLT
1	1	1	1	1	1	AN8C35A	BOLT
5	5	5	5	5	5	MS21043-3	NUT
4	4	4	4	4	4	MS21043-6	NUT
1	1	1	1	1	1	MS21083C8	NUT
4	4	4	4	4	4	NAS1149C0332R	WASHER
9	9	9	9	9	9	NAS1149C0363R	WASHER
1	1	1	1	1	1	NAS1149C0832R	WASHER
4	4	4	4	4	4	NAS1515H3L	WASHER

NOTES:

- 1) MATERIAL: MAKE D4168-1/-2/-3/-4/-5/-6 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.3
OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4168-041/-042/-043/-044 = 32.3 lbs
D4168-051/-052 = 31.9 lbs
- 8) WELD PER DART QSI 004
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF FINISH WITH MEK DEGREASER.
- 11) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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WORK ORDER

NO. 193532 MCL
19-04-16

C	ADDED -051/-052 (ZN D5-1 SHEETS 4, 15-16); ADDED D4168-5/-6 (ZN D5-1, SHEETS 9, 10); D3488-3/-4 REPLACES D3488-041/-042 (ZN C5-1, D2-11, D2-12, D2-13, D2-14); ADDED NOTES 13, 14 (ZN C4-1); NAS1149C0363R WAS AN960C10 (ZN A5-1, C6-11, C7-11, D8-11, C6-12, C7-12, D8-12, C6-13, C7-13, D8-13, C6-14, C7-14, D8-14); NAS1149C0332R WAS AN960C10L (ZN B1-11, B1-12, B1-13, B1-14); NAS1149C0832R WAS AN960C818L (ZN C1-11, C1-12, C1-13, C1-14)	ZF	18.03.01
B	ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1-4/-5/-6/-7); UPDATED FINISH OPTIONS. REASON: PAR13-276 AND NCR13-2757	MB	13.07.11
A	NEW ISSUE	SC	10.08.09
REV.	DESCRIPTION	BY	DATE
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CHECKED	MW		
MFG. APPR.	DD		
APPROVED	NO		
DE APPR.	DS		
DATE	18.03.01		

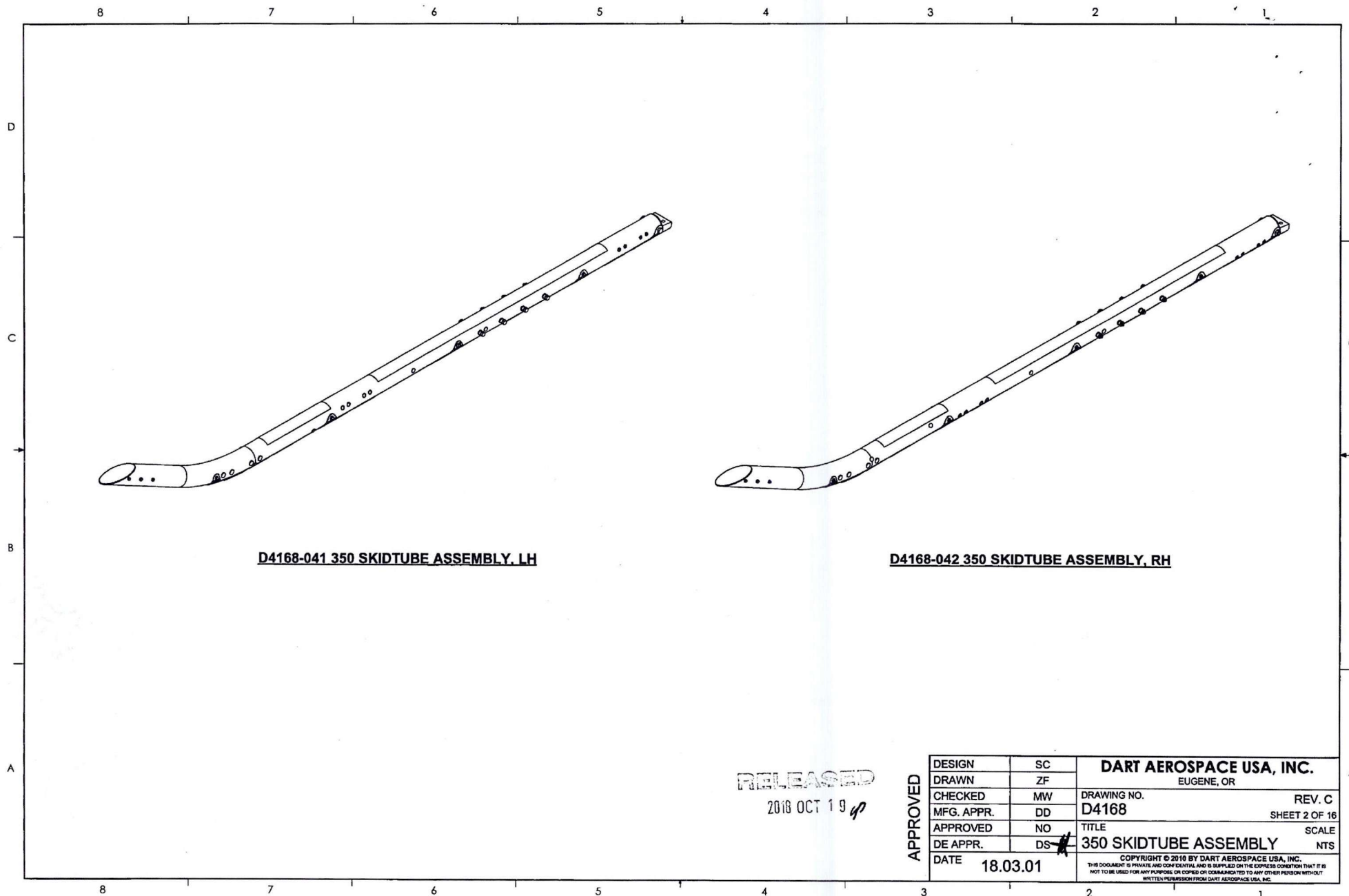
DART AEROSPACE USA, INC.
EUGENE, OR

DRAWING NO. REV. C
D4168 SHEET 1 OF 16
TITLE SCALE
350 SKIDTUBE ASSEMBLY NTS

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2019 OCT 19
ED 19-03

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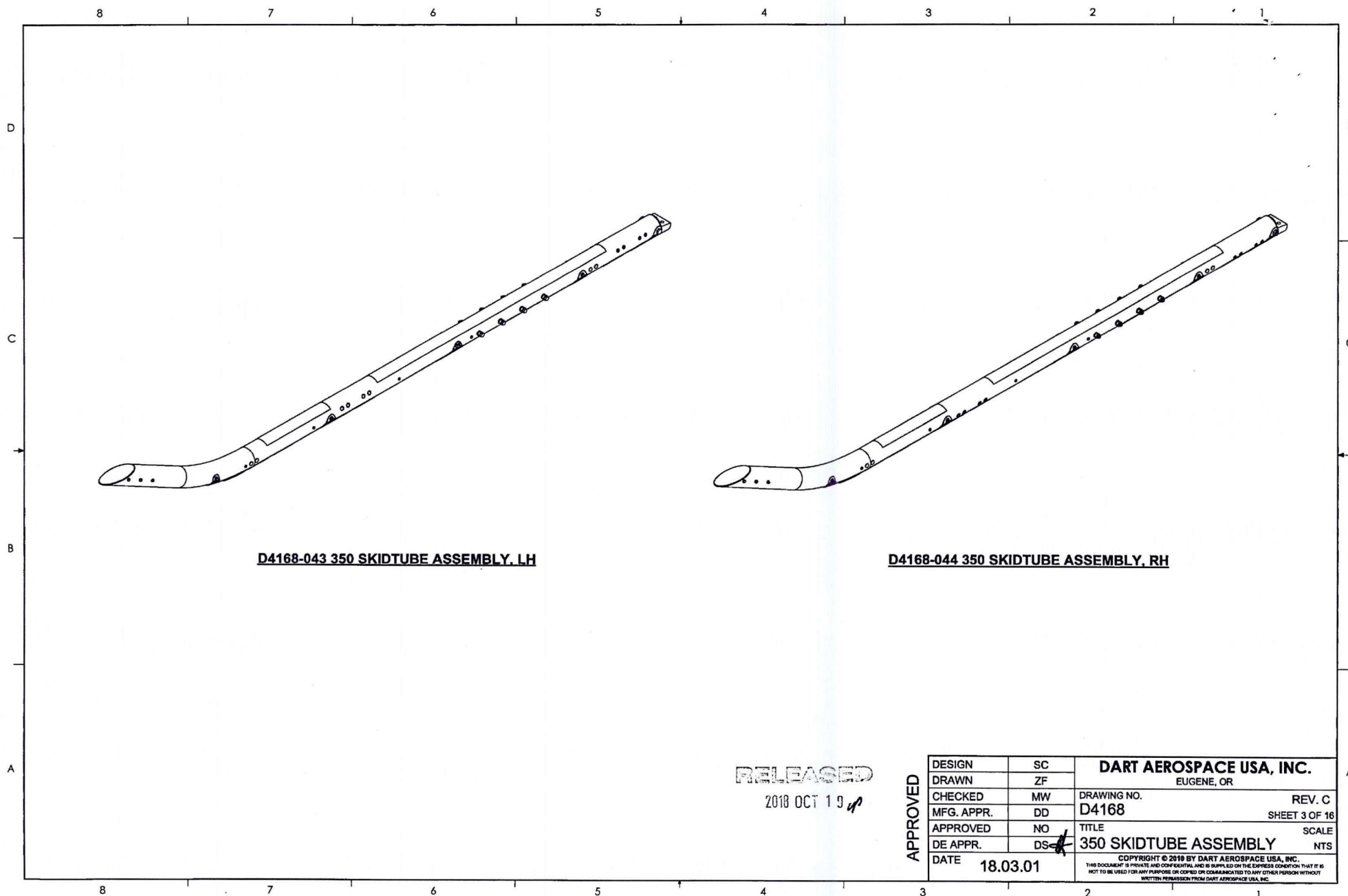
D4168-041 350 SKIDTUBE ASSEMBLY, LH

D4168-042 350 SKIDTUBE ASSEMBLY, RH

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2018 OCT 19 *qp*

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APPROVED	NO	TITLE	SCALE
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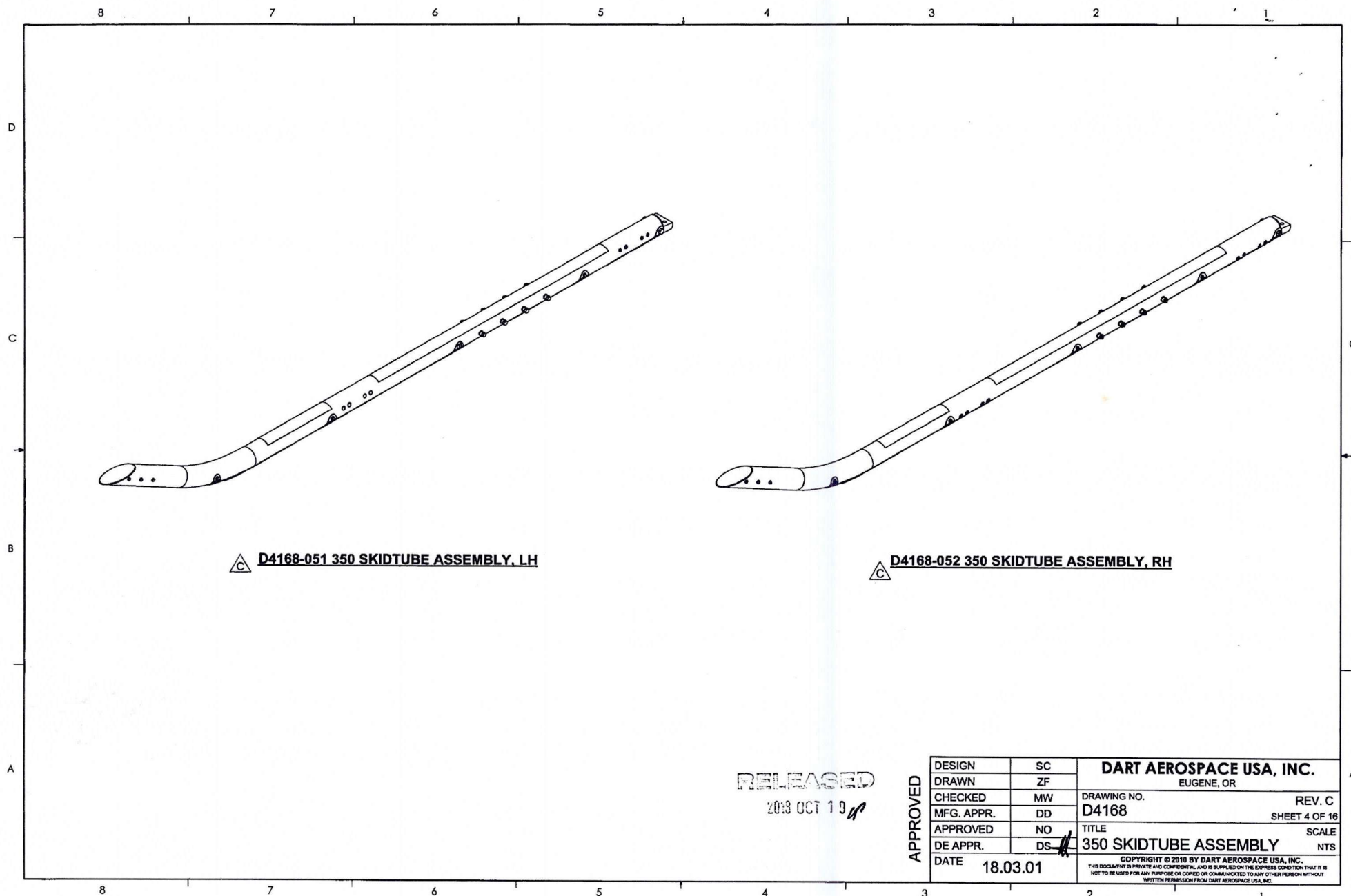
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D4168-044 350 SKIDTUBE ASSEMBLY, RH

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2018 OCT 19

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D4168-051 350 SKIDTUBE ASSEMBLY, LH

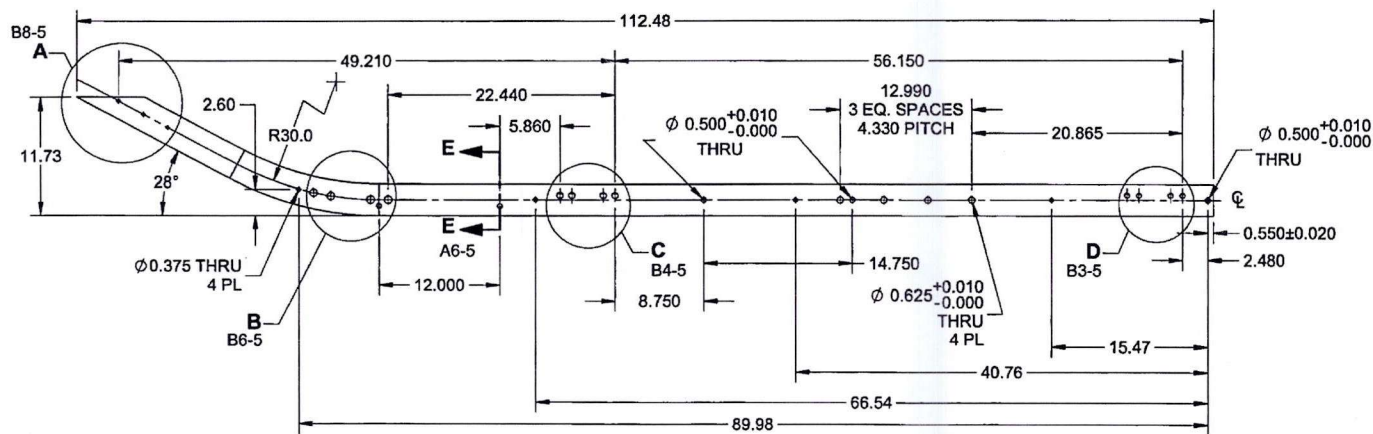
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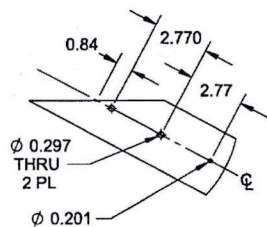
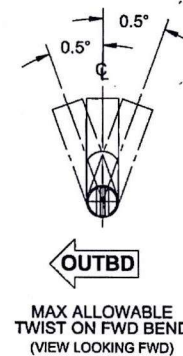
2013 OCT 10

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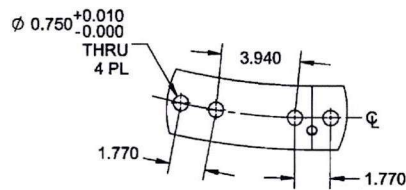
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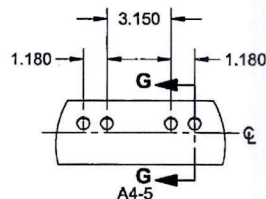
D4168-1 LH SKIDTUBE



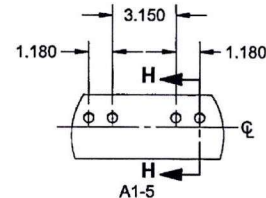
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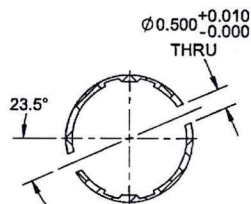
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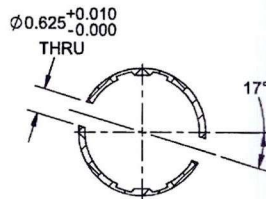
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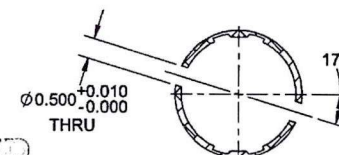
DETAIL D
SCALE 2X



SECTION E-E
SCALE 4X, 2 PL



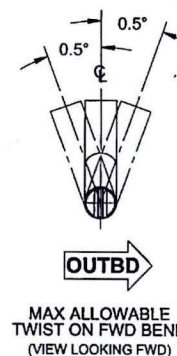
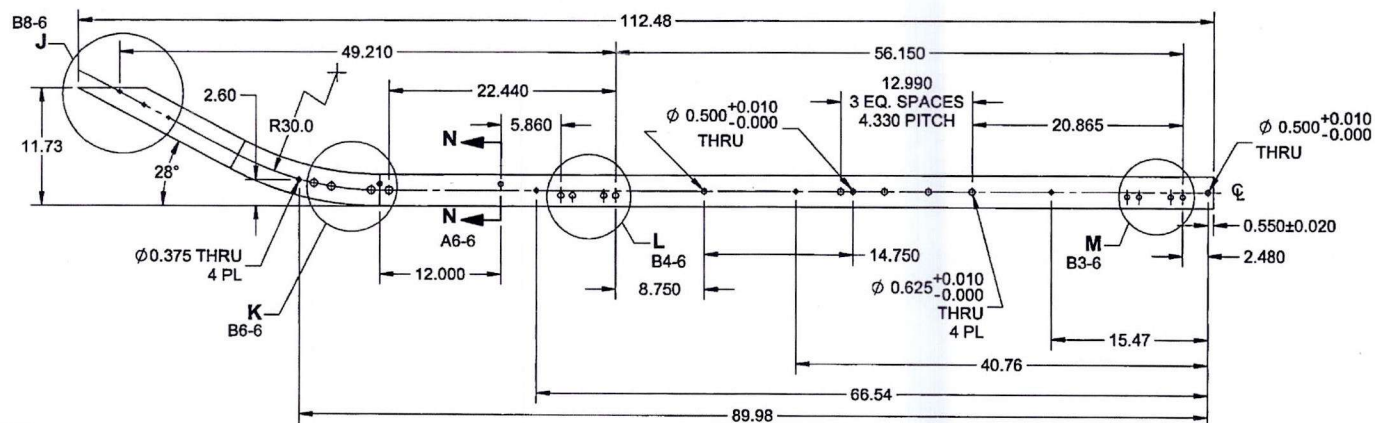
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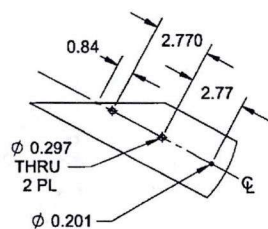
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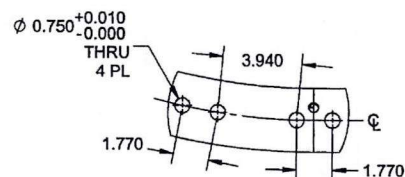
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APPROVED	NO	TITLE	SCALE
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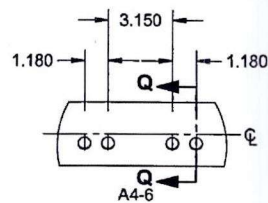
D4168-2 RH SKIDTUBE



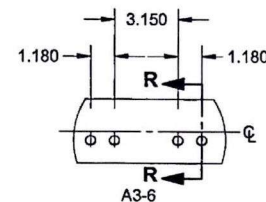
DETAIL J
SCALE 2X



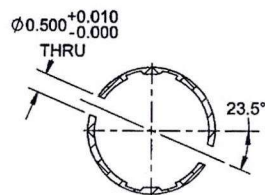
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SCALE 2X



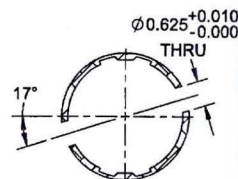
DETAIL L
SCALE 2X



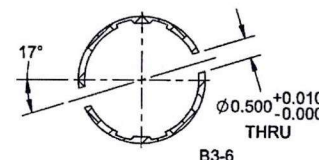
DETAIL M
SCALE 2X



SECTION N-N
SCALE 4X, 2 PL



SECTION Q-Q
SCALE 4X, 4 PL



SECTION R-R
SCALE 4X, 4 PL

APPROVED

DESIGN	SC
DRAWN	ZF
CHECKED	MW
MFG. APPR.	DD
APPROVED	NO
DE APPR.	DS
DATE	18.03.01

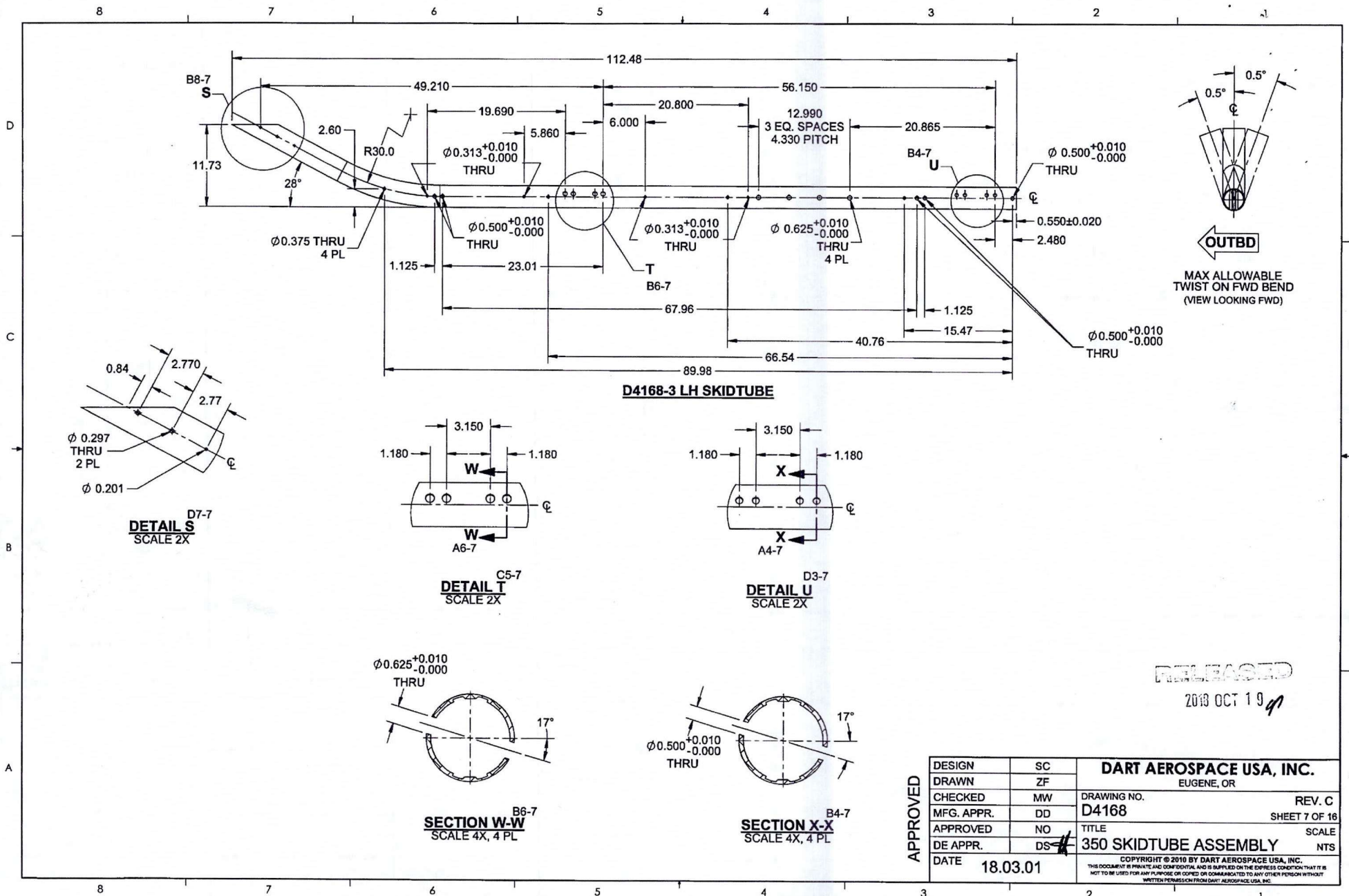
DART AEROSPACE USA, INC.
EUGENE, OR

DRAWING NO. **D4168** REV. C
TITLE **350 SKIDTUBE ASSEMBLY** SCALE NTS

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RELEASED

2010 OCT 19



Entered: _____ Date: _____

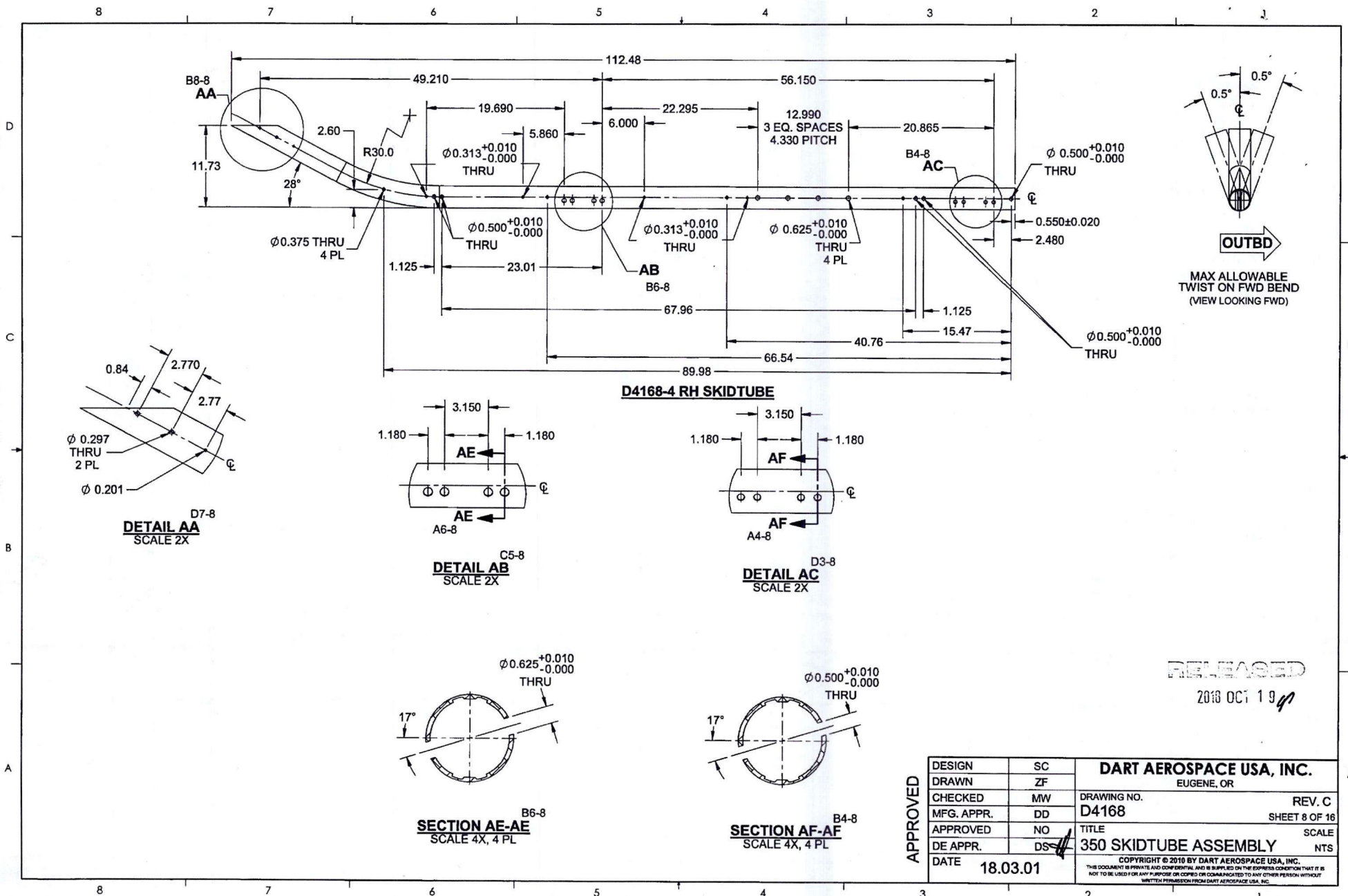


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Entered: _____ Date: _____

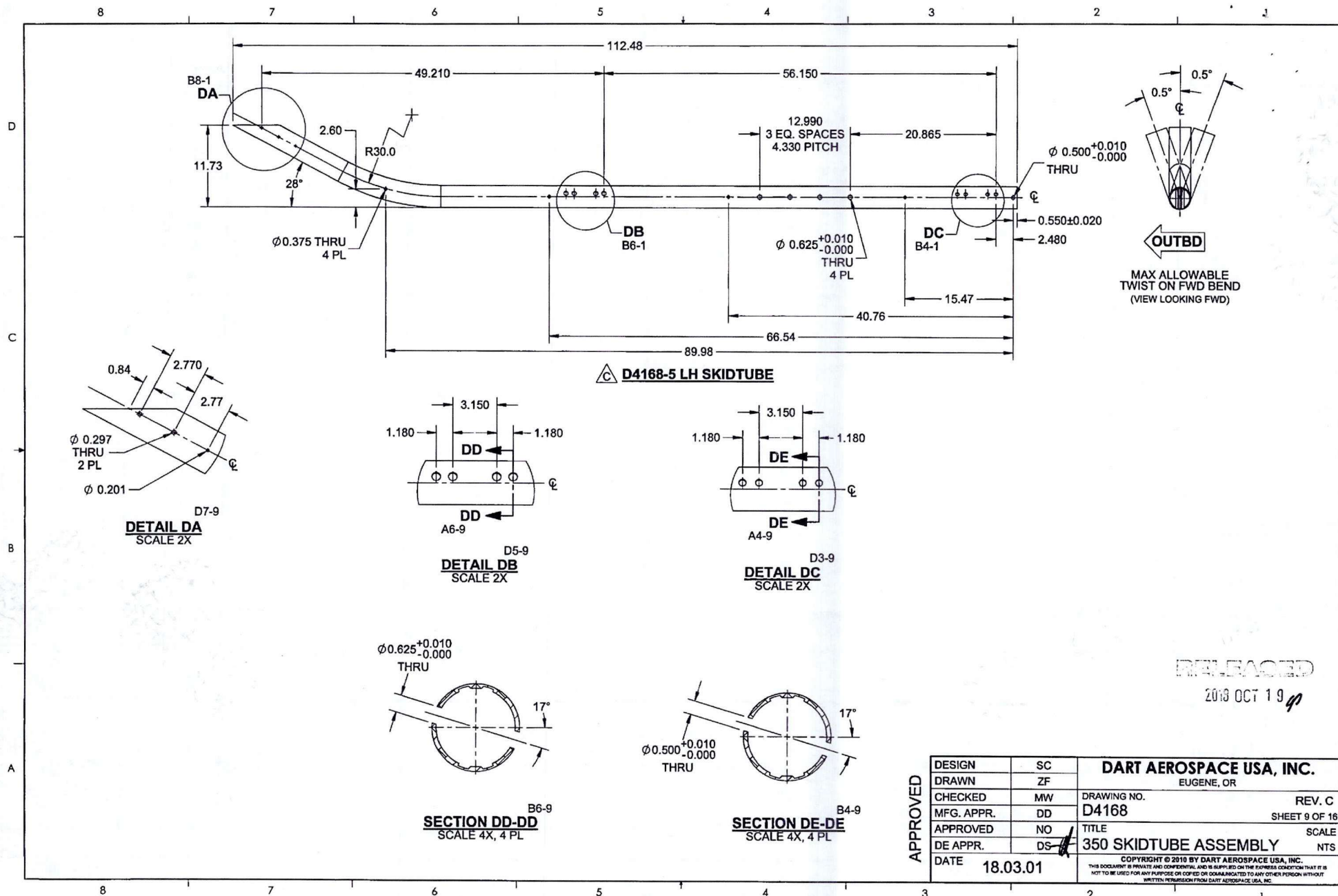


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor		
			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Entered: _____ Date: _____

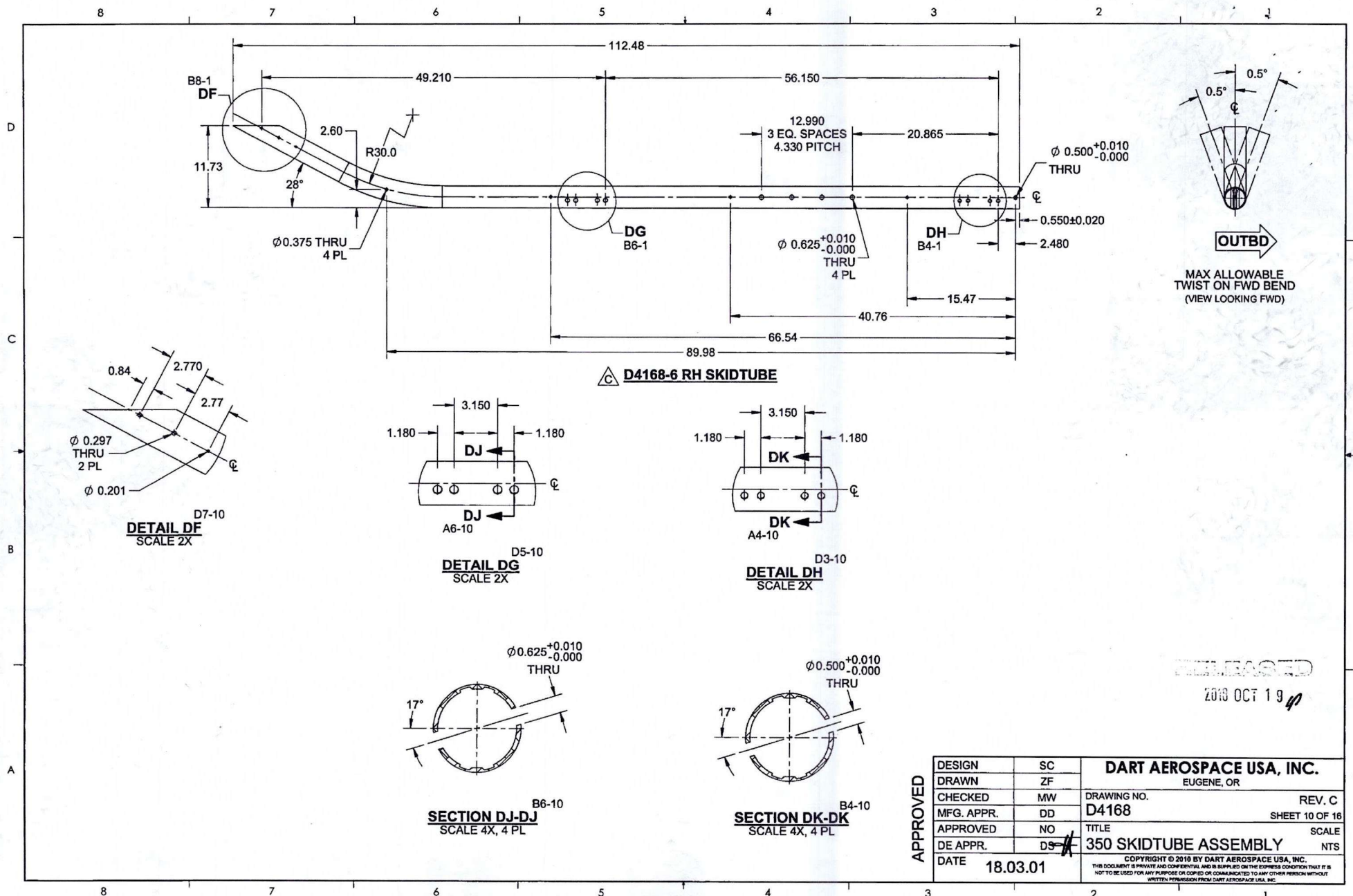


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
		Other/Details:			



RELEASED
2010 OCT 19

Entered: _____ Date: _____

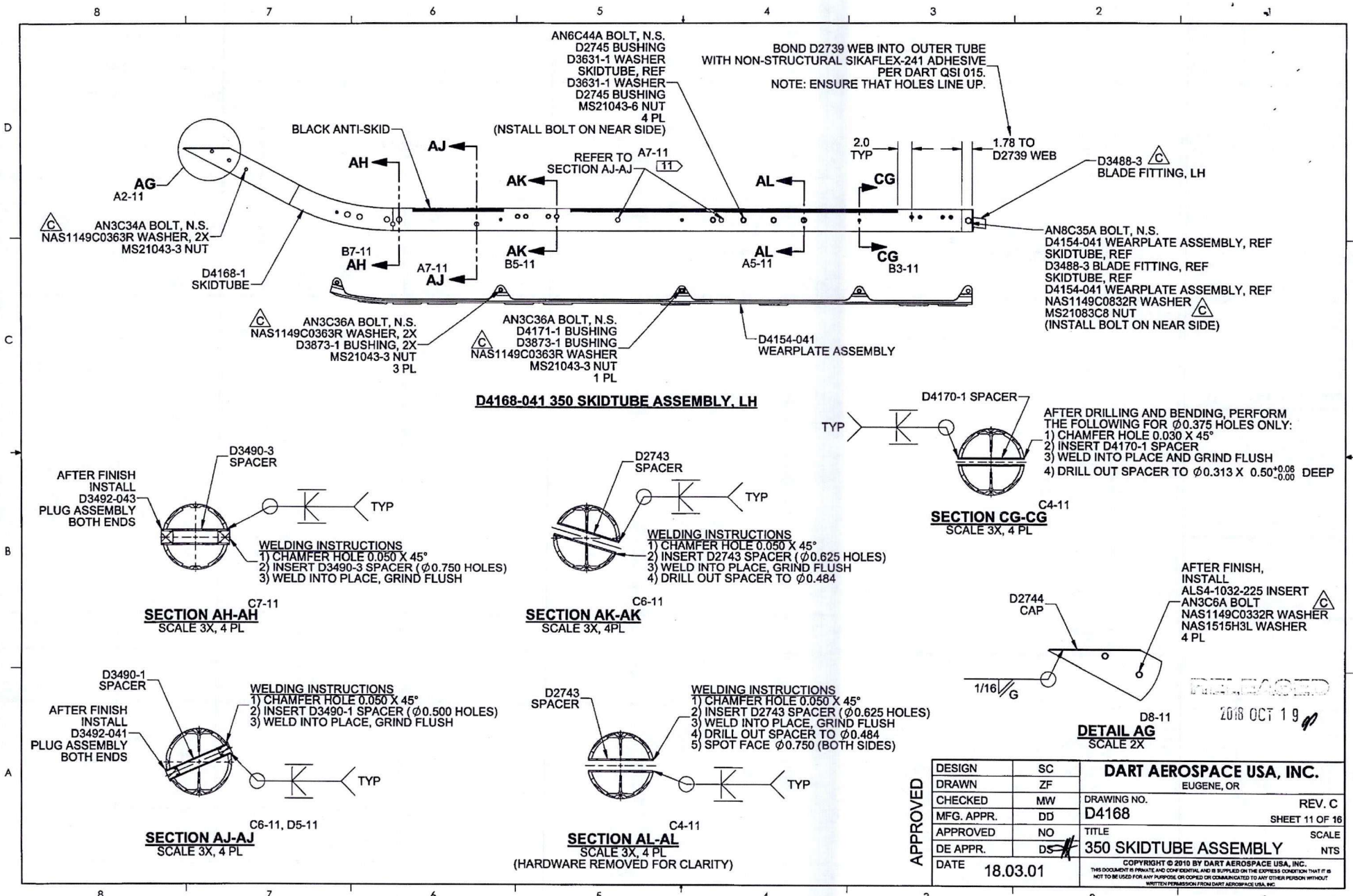


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



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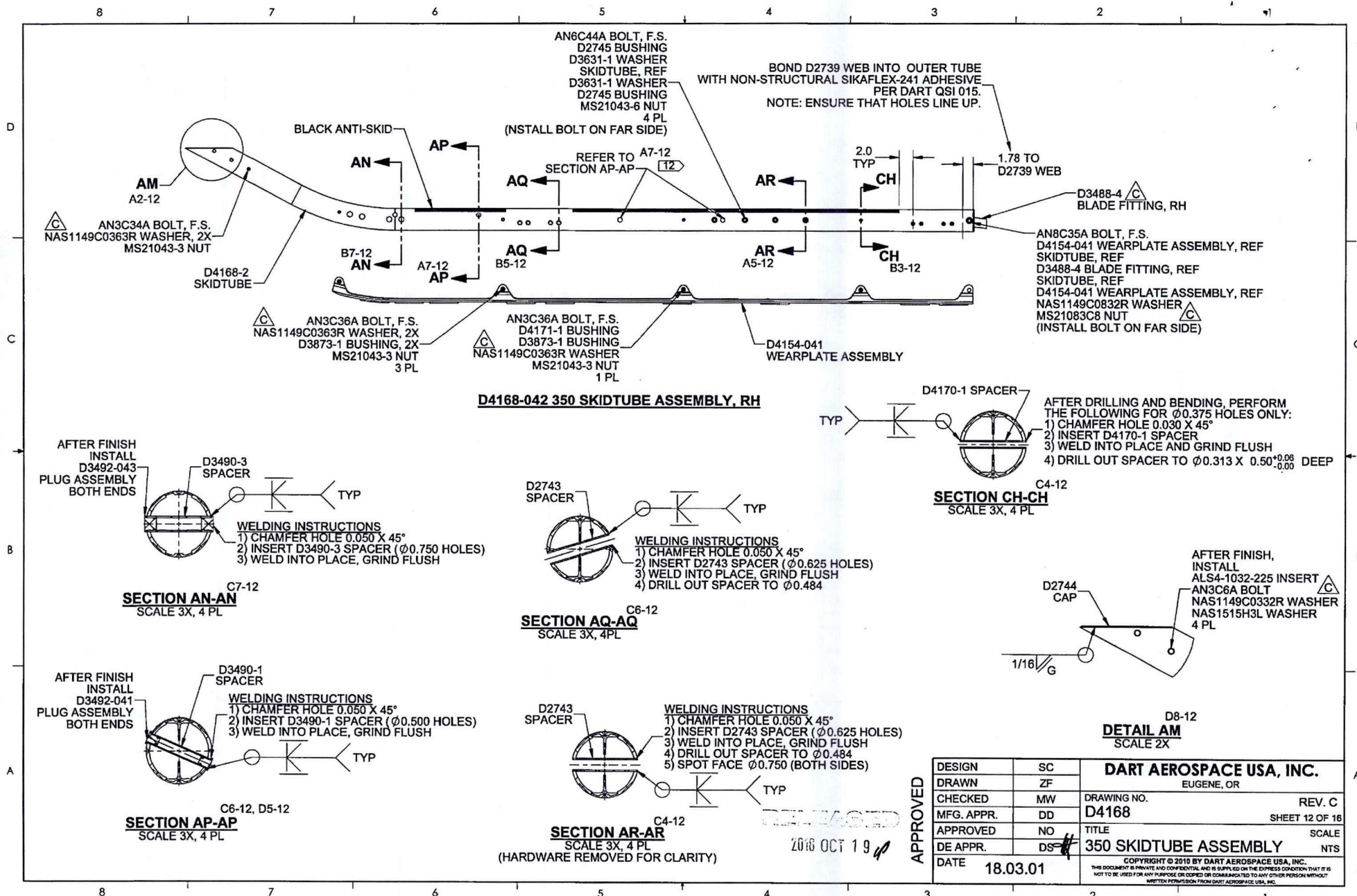


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Entered: _____ Date: _____

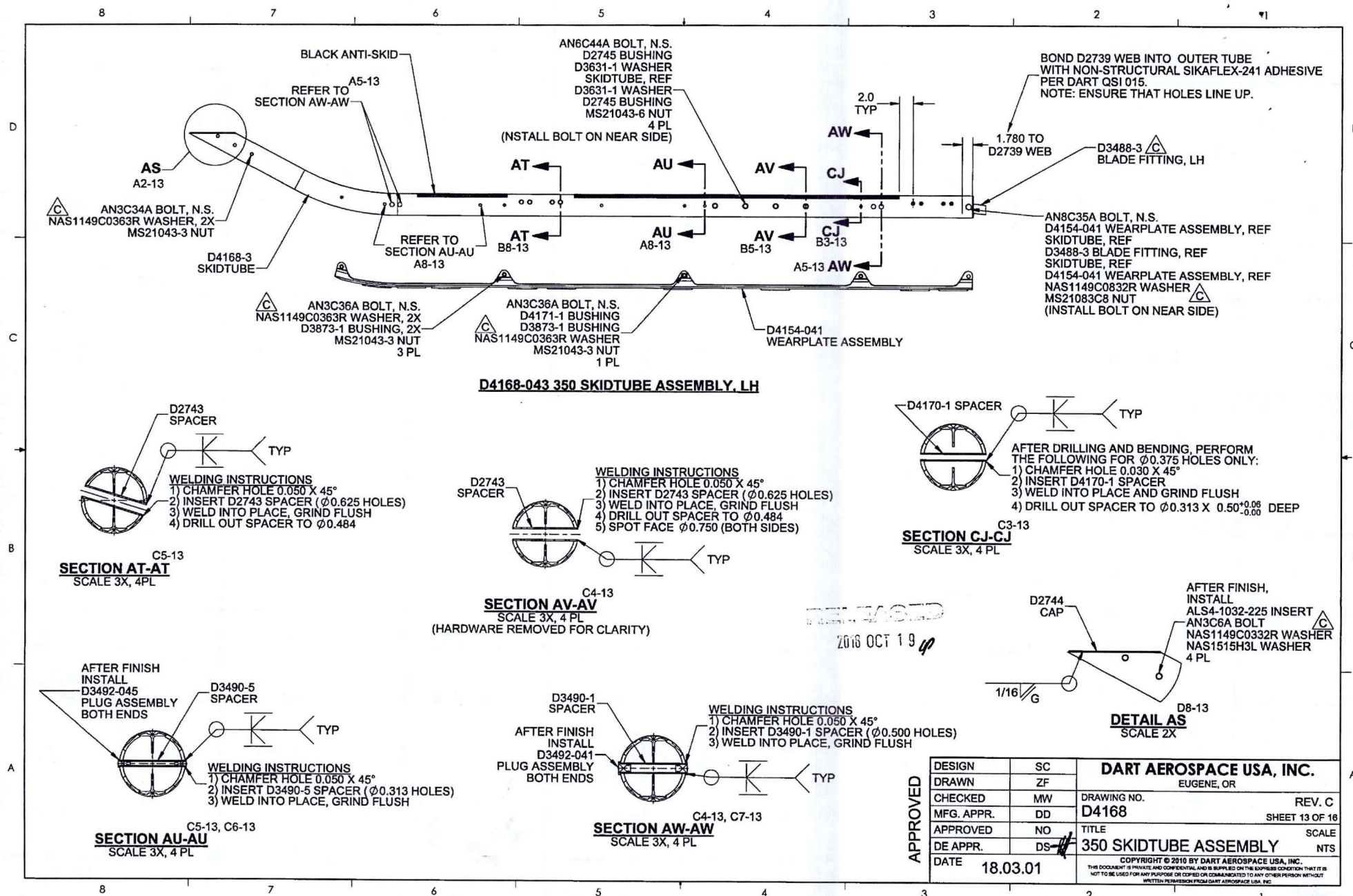


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Entered: _____ Date: _____

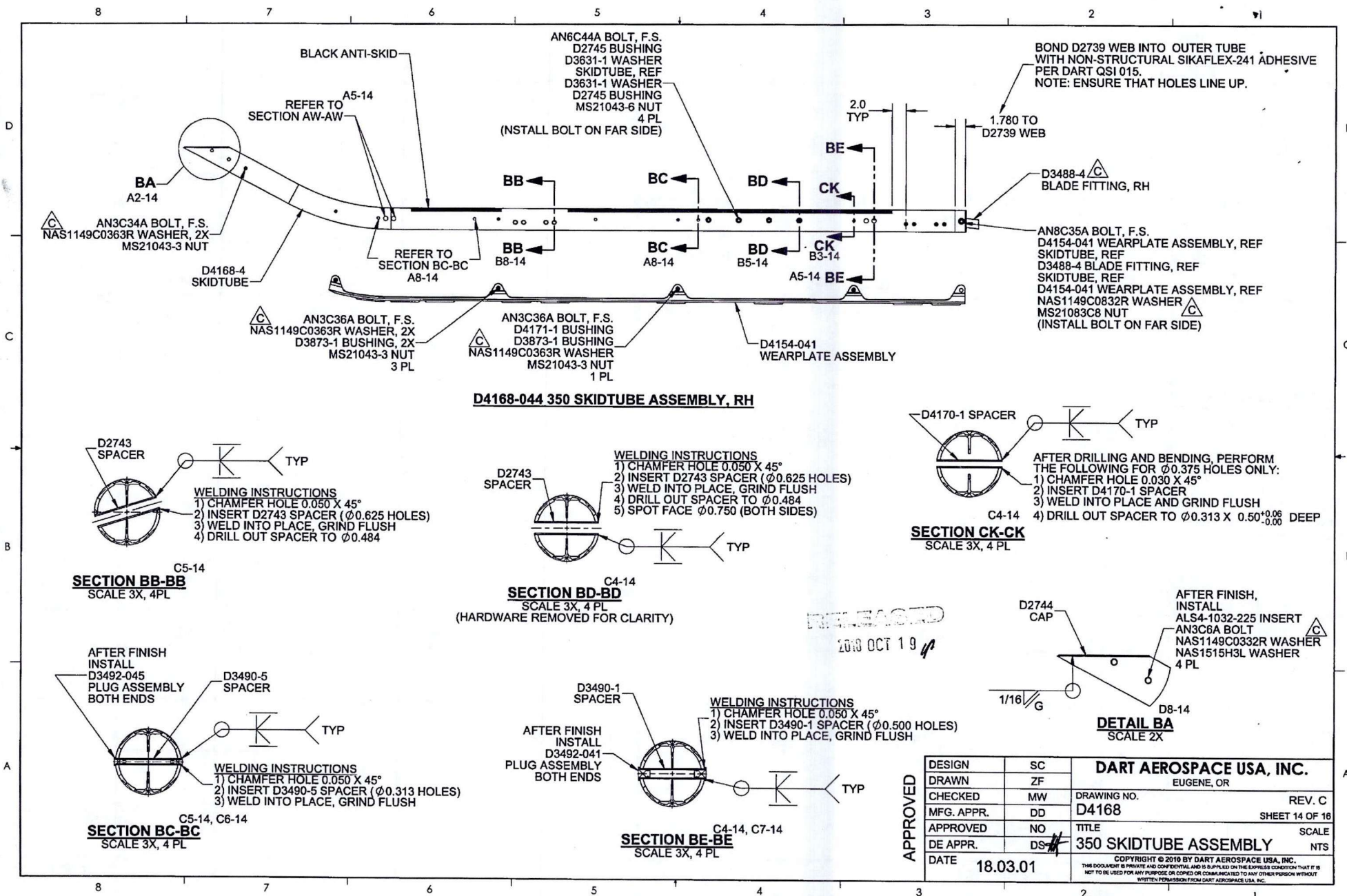


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation			Disposition		
			Completed By		
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			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



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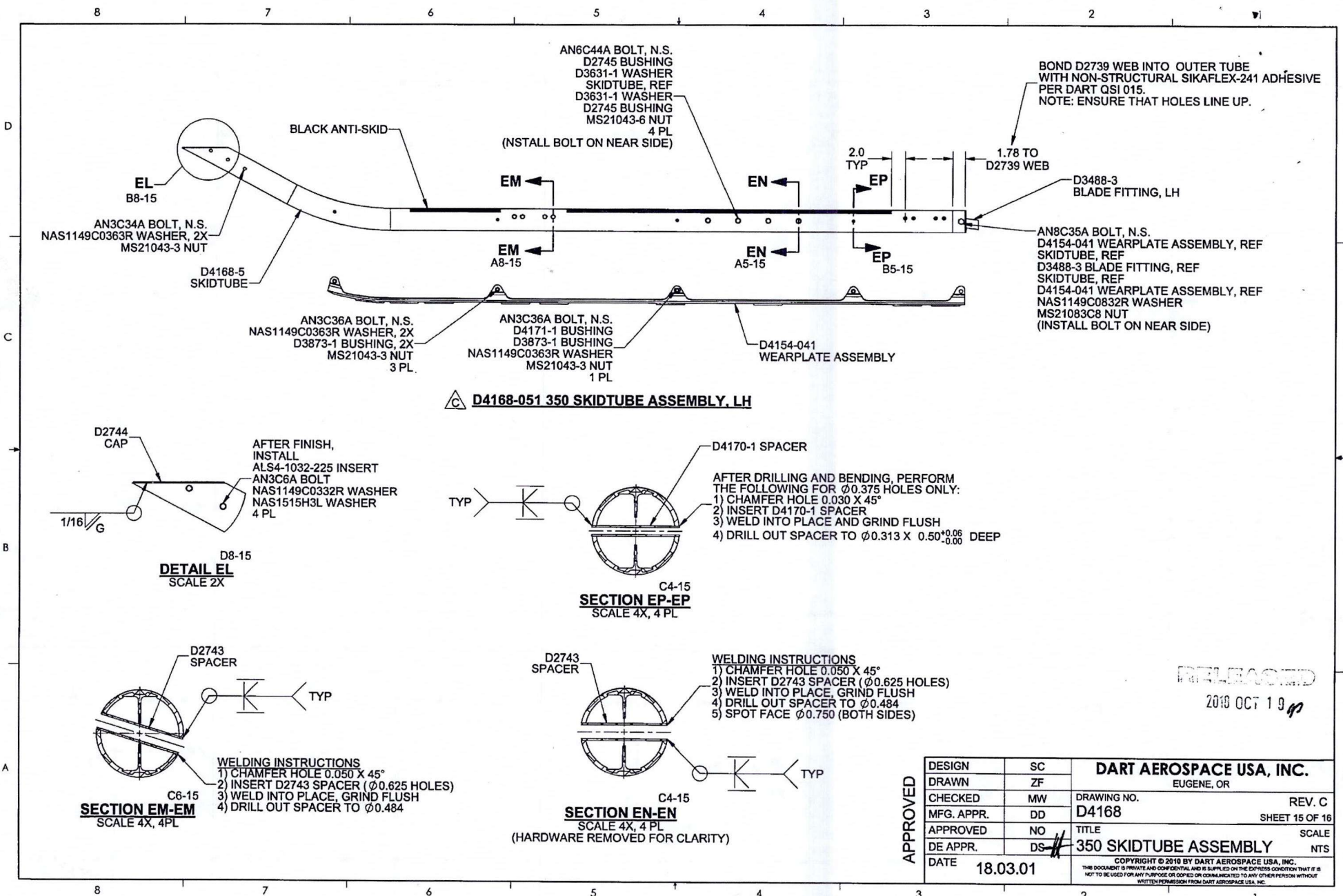


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



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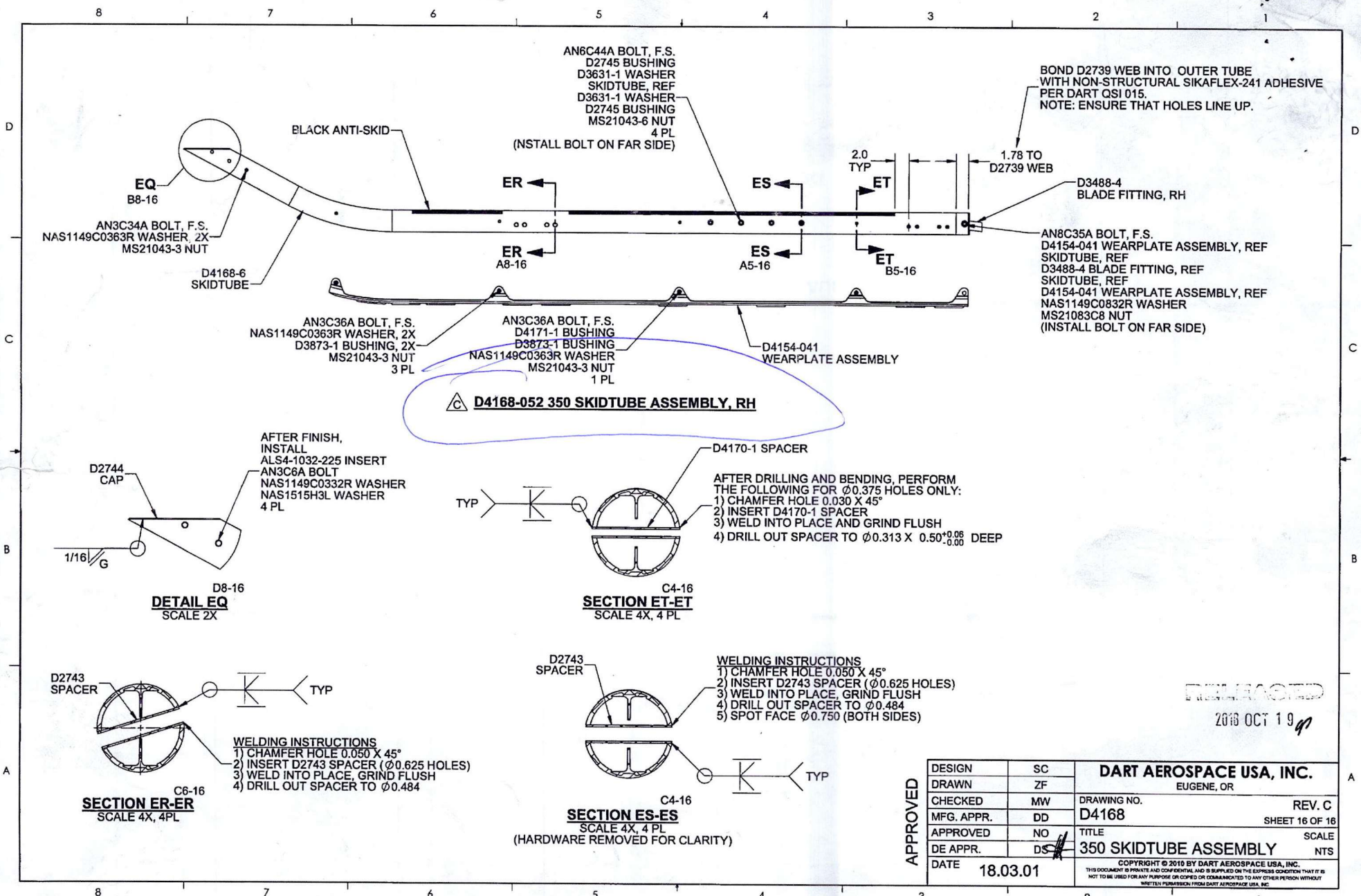


WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor		
			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



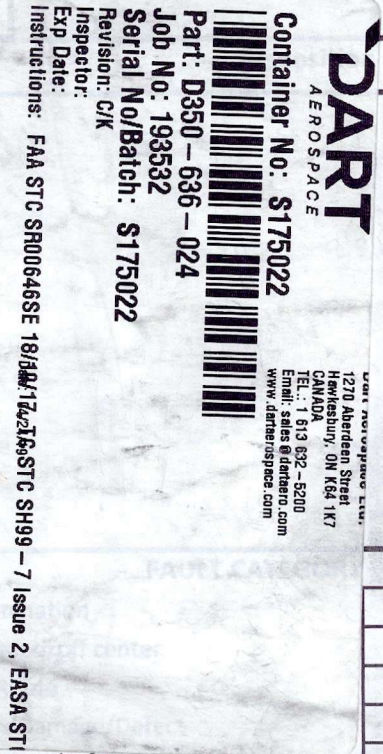
Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	QTY Affected: _____			MRB (QS1042) _____	
 Part: D350 - 636 - 024 Job No: 193532 Serial No/Batch: S175022 Revision: C/K Inspector: _____ Exp Date: _____ Instructions: FAA STC SR00646SE 18/06/17 EASA STC SH99 - 7 Issue 2, EASA STC			Completed By _____		
			Lead hand / Supervisor _____		
			QC / QA Coordinator _____		
Ro _____ Manufactur _____ Equip/Tooling _____ Handling/Preservation _____ Material _____ Product Improvement _____ Process Improvement _____ Human Factors _____ Crimp/Kink/Ripple/Wave/Twist _____ Marks/Chatter _____ Mislabelled _____ Other Details _____ Incomplete/Unclear Instructions _____ Drill Holes _____ Fit/Function _____			☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread		

7.0 PARTS LIST

D350-636-015/-016/-017/-018 SKIDTUBES AT CHG 006 AND SUBSEQUENT
D350-636-023/-024 SKIDTUBES AT CHG 001 AND SUBSEQUENT

Item	Qty -015	Qty -016	Qty -017	Qty -018	Qty -023	Qty -024	Qty -047	Part Number	Description
	X							D350-636-015	SKIDTUBE INSTALLATION, LH, AERAZUR/DART CYLINDRICAL FLOAT COMPATIBLE W/TRAINING WEARPLATE
		X						D350-636-016	SKIDTUBE INSTALLATION, RH, AERAZUR/DART CYLINDRICAL FLOAT COMPATIBLE W/TRAINING WEARPLATE
			X					D350-636-017	SKIDTUBE INSTALLATION, LH AIRCRAUISER/DART TRI-BAG FLOAT COMPATIBLE W/TRAINING WEARPLATE
				X				D350-636-018	SKIDTUBE INSTALLATION, RH AIRCRAUISER/DART TRI-BAG FLOAT COMPATIBLE W/TRAINING WEARPLATE
					X			D350-636-023	SKIDTUBE INSTALLATION, LH, STD COMPATIBLE W/TRAINING WEARPLATE
						X		D350-636-024	SKIDTUBE INSTALLATION, RH, STD COMPATIBLE W/TRAINING WEARPLATE
							X	D350-636-047	TRAINING WEARPLATE KIT (LH/RH)
1	1							D4168-041	SKIDTUBE ASSEMBLY, LH
1		1						D4168-042	SKIDTUBE ASSEMBLY, RH
1			1					D4168-043	SKIDTUBE ASSEMBLY, LH
1				1				D4168-044	SKIDTUBE ASSEMBLY, RH
1					1			D4168-051	SKIDTUBE ASSEMBLY, LH
1						1		D4168-052	SKIDTUBE ASSEMBLY, RH
*1	1							D4168-1	SKIDTUBE WELDMENT, LH
*1		1						D4168-2	SKIDTUBE WELDMENT, RH
*1			1					D4168-3	SKIDTUBE WELDMENT, LH
*1				1				D4168-4	SKIDTUBE WELDMENT, RH
*1					1			D4168-5	SKIDTUBE WELDMENT, LH
*1						1		D4168-6	SKIDTUBE WELDMENT, RH
**2	8	8	8	8	8	8		350A41-1027-20	SCREW
**3	8	8	8	8	8	8		23119AG120LE	WASHER
**4	8	8	8	8	8	8		22541N120	NUT
*5	1	1	1	1	1	1		AN8C35A	BOLT
*6A	1	1	1	1	1	1		NAS1149CO832R	WASHER
*7	1	1	1	1	1	1		MS21083C8	NUT
*8	1		1		1			D3488-3	BLADE FITTING, LH
*8		1		1		1		D3488-4	BLADE FITTING, RH
9	1	1	1	1	1	1		D2741	BLADE
10	2	2	2	2	2	2		AN8C21A	BOLT
11	2	2	2	2	2	2		NAS1149CO863J	WASHER
12	2	2	2	2	2	2		MS21083C8	NUT
*14	4	4	4	4	4	4		AN6C44A	BOLT
*15	8	8	8	8	8	8		D2745	BUSHING
*16	4	4	4	4	4	4		MS21043-6	NUT
*17	8	8	8	8	8	8		D3631-1	WASHER
*18	4	4	4	4	4	4		ALS4-1032-225	INSERT
*19	4	4	4	4	4	4		AN3C6A	BOLT
*20A	4	4	4	4	4	4		NAS1149CO332R	WASHER
*20B	4	4	4	4	4	4		NAS1515H3L	WASHER

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Revision: K

Date: 18.04.04

Item	Qty -015	Qty -016	Qty -017	Qty -018	Qty -023	Qty -024	Qty -047	Part Number	Description
*30	8	8	8	8				D3492-041	PLUG ASSEMBLY
*31	8	8						D3492-043	PLUG ASSEMBLY
*32			8	8				D3492-045	PLUG ASSEMBLY
***43	2	2	2	2				D3493-1	WASHER
*90	1	1	1	1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
*91A	4	4	4	4	4	4	4	AN3C36A	BOLT ¹
91B	1	1	1	1	1	1	1	AN3C37A	BOLT ²
91C	1	1	1	1			1	AN3C42A	BOLT ³
*92	7	7	7	7	7	7	8	NAS1149CO363R	WASHER
92A			1	1				NAS1149CO363R	WASHER ³
*93	4	4	4	4	4	4	4	MS21043-3	NUT
*94	7	7	7	7	7	7	8	D3873-1	BUSHING
94A			1	1				D3873-1	BUSHING ³
*95	1	1	1	1	1	1	1	D4171-1	BUSHING ⁴
96							4	D4170-3	SPACER
*97	1	1	1	1	1	1	1	AN3C34A	BOLT
*98	2	2	2	2	2	2	2	NAS1149CO363R	WASHER
*99	1	1	1	1	1	1	1	MS21043-3	NUT

* PART OF D4168-041/-042/-043/-044/-051/-052

** TO BE SUPPLIED BY CUSTOMER

*** ONLY INSTALLED IF INSTALLING A DART FLOAT SYSTEM

¹ QTY USED MAY BE LESS ON SKIDTUBES WITH DART CYLINDRICAL OR TRI-BAG FLOATS

² HARDWARE USED ON THE SKIDTUBES INSTALLED WITH DART CYLINDRICAL BAG FLOATS

³ HARDWARE USED ON THE SKIDTUBES INSTALLED WITH DART TRI-BAG FLOATS

⁴ HARDWARE NOT USED ON THE SKIDTUBES INSTALLED WITH DART TRI-BAG FLOATS

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Revision: **K**

Date: 18.04.04

Change Record

PAGE 1 OF 1

Part Number: D350-636-023/-024

Description: SKIDTUBE INSTALLATION LH/RH, STD COMPATIBLE W/TRAINING WEARPLATI

[illegible]